

Federal Renewable Power Overview

David McAndrew Federal Energy Management Program



Executive Order 13123 Renewable Energy Related Goals

- The equivalent of 2.5% of Federal facility electricity consumption from renewable resources by 2005
- Reduce energy consumption (renewable use counts)
 - Facility energy per square foot to be reduced by 30 percent in 2005 and 35 percent in 2010 relative to 1985
 - Industrial/laboratory energy to be reduced by 20 percent in 2005 and 25 percent in 2010 relative to 1990
- Reduce greenhouse gas emissions 30 percent by 2010 compared to 1990
 - Sec 710. "Renewable Energy" means energy produced by solar, wind, geothermal, and biomass power.

Federal Renewable Energy Goal

Goal – 1384 GWh - Equivalent of 2.5% of Federal facility electricity use by 2005

Progress

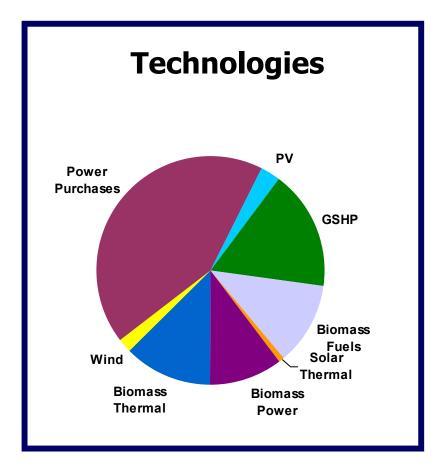
June 2000 173 GWh

Current: 882 GWh

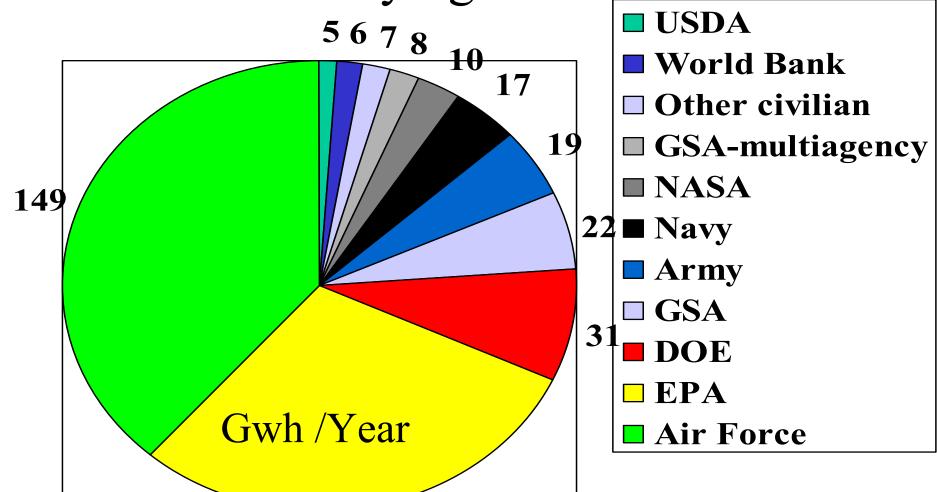
To Go: 501 GWh

Where We Are: Federal Renewable Technologies and Purchases post 1990 – Data as of July 2003

Solar Thermal	6.48	GWh
Biomass Power	92.44	GWh
Biomass Thermal	108.44	GWh
Wind	18.83	GWh
Power Purchases	379.00	GWh
Photovoltaic (PV)	24.71	GWh
Ground Source Heat Pump	148.14	GWh
Biomass Fuels	103.99	GWh
TOTAL	882.03	GWh



Who is Buying Renewables?



Federal Purchasing Methods

- Utility Green Pricing
 - Can be a sole source arrangement if with local utility
 - Easy for agency to complete
- Solicitation in Competitive Electricity Markets
 - General Services Administration (GSA)
 - Ken Shutika (202) 260-9713
 - Defense Energy Support Center (DESC)
 - John Nelson (703) 767-8333
- Stand alone Renewable Energy Certificates
 - More work needs to be done with budgeting and legal folks
 - Competitive acquisition rules apply

Renewable Power Purchasing Lessons Learned

- Load aggregations can lead to big purchases:
 - Target big users
 - Don't herd cats
- Keep it simple
 - Most agencies will not jump through hoops to buy green power
- Federal agencies are price sensitive,
 - High priced programs have not done well
 - Cheap LFG is easier to sell than expensive solar.
- Consider a custom product for large Feds
 - Cheaper resources
 - Exclusion from FAC for renewable energy purchased
 - Fixed price products as a hedge against Fossil price increases

FEMP Renewable Power Contact Info.

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• Go To Marketers Marketers/FEMP session on Wednesday for more detailed information